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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Jorg Rosenberg

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EXAMINER

HUSON, MONICA ANNE

ART UNIT

PAPER NUMBER

1742

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/787,079	Applicant(s) ROSENBERG ET AL.	
	Examiner MONICA HUSON	Art Unit 1742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1,3,5,7-9 and 11-19 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1,3,5,7-9 and 11-19 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 07 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 3) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 4) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

This office action is in response to the Remarks filed 18 October 2011.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 5, 7-9, and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dabal et al. (U.S. Patent 4,072,551), in view of Klimesch et al. (U.S. Patent 5,073,379) and Langner (U.S. Patent 4,804,319). Regarding Claim 1, Dabal shows that it is known to carry out a method for producing tablets by melt extrusion (Column 8, lines 1-44; Column 10, lines 3-13), in which an extrudable pharmaceutical mixture is heated and extruded in the form of a continuous product strip, wherein, in a first stage, the still deformable product strip is compressed to a continuous tablet belt, the individual tablets in the belt being connected together by product webs (Figure 5, element 82, 83; Figure 6B), in a second stage, downstream of the first stage, the tablet belt is allowed to cool to form a solidified tablet belt (Figure 5, printing unit; It is noted that ambient cooling will take place along the transport sections.), in a third stage, downstream of the second stage, the tablets are mechanically singulated in a continuous process (Figure 5, unitizing unit), wherein a force with a component perpendicular to the plane of the tablet belt is allowed to act on the tablet belt for singulation of the tablet (Figure 5, unitizing unit; It is noted that the force exerted by the roller will have at least two components.), and then the singulated tablets are transported further to a fourth stage downstream of the said third stage where the

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singulated tablets are subsequently deflashed (Column 32, lines 13-18). Dabal does not show extruding a mixture containing a pharmaceutically active ingredient. Klimesch et al., hereafter "Klimesch," show that it is known to carry out a method of extruding a mixture containing a pharmaceutically active ingredient (Column 2, lines 40-63). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Klimesch's melt extrusion composition that includes a pharmaceutically active ingredient during Dabal's molding process in order to avoid having to add the active ingredient at a later stage after extrusion. Dabal does not show a directional force that diverts the tablet belt in a downward direction from a transport plane to a tangential plane at an angle to the transport plane. Klimesch '379 shows that it is known to carry out a method wherein the perpendicular force component is generated by diverting the solidified tablet belt downwardly out of its transport plane to an angled tangential plane (Figure 1: singulated tablets are diverted downward in a tangential plane at an angle to the transport (horizontal) plane; Column 2, lines 61-67). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Klimesch '379's diverting force to tabulate Dabal's belt in order to most efficiently achieve the unitizing operation. Dabal does not show passing the solidified tablet belt underneath a roller that diverts the tablet belt. Langner shows that it is known to make compacted tablets by passing the tablets/belt underneath a roller which directly contacts the solidified tablets/belt (Figure 1, element 7; Column 5, lines 20-31). It would have been prima facie obvious to one of ordinary skill in the art to use Langner's diverting roller during Dabal's method because substitution of equivalents (singulating mechanisms) is prima facie obvious (MPEP 2144.06 (II)).

Regarding Claim 3, Dabal shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein a force with a component parallel to the plane of the tablet belt is allowed to act on the tablet belt for singulation of the tablets (Figure 5, unitizing unit; It is noted that the force exerted by the roller will have at least two components.).

Regarding Claim 5, Dabal shows the process as claimed as discussed in the rejection of Claims 1 and 2 above, Regarding Claim 5, Dabal shows the process as

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claimed as discussed in the rejection of Claim 3 above, including a method wherein the parallel force component is generated by exerting a traction force on the solidified tablet belt (Figure 5, unitizing unit; It is noted that the force exerted by the rollers will include some traction force.).

Regarding Claim 12, Dabal shows that it is known to have an apparatus for producing tablets (Figure 5), comprising at least one extruder means for heating a pharmaceutical mixture (Column 8, lines 1-44; Column 10, lines 3-13); means for shaping a tablet belt from said extruded heated pharmaceutical mixture arranged downstream of said extruder, said extruder means forming a tablet belt comprising individual tablets connected by a product web (Figure 5, element 82, 83; it is interpreted that although there is not a large web space between the tablets, the tablets are connected by a web between each tablet, even if the web space is very small.; Figure 6B); first transport means for said tablet belt comprising means for cooling the extruded tablet belts and which is arranged downstream of said shaping means (Figure 5, printing unit; It is noted that ambient cooling will take place along the transport sections.), and means for singulating and deflashing said tablets, wherein said means for singulating and deflashing said tablets comprise at least one singulating means arranged downstream of said first transport means and at least one deflashing means arranged downstream of said singulating means and spatially separate therefrom (Figure 5, unitizing unit; Column 32, lines 13-18; It is noted that the transport means is the tension force that is generated by the two rollers acting together on the tablet belt.). Dabal does not show extruding a mixture containing a pharmaceutically active ingredient. Klimesch shows that it is known to carry out a method of extruding a mixture containing a pharmaceutically active ingredient (Column 2, lines 40-63). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Klimesch's melt extrusion composition that includes a pharmaceutically active ingredient during Dabal's molding process in order to avoid having to add the active ingredient at a later stage after extrusion. Dabal does not show a directional force that diverts the tablet belt in a downward direction from a transport plane to a

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tangential plane at an angle to the transport plane. Klimesch '379 shows that it is known to carry out a method wherein the perpendicular force component is generated by diverting the solidified tablet belt downwardly out of its transport plane to an angled tangential plane (Figure 1: singulated tablets are diverted downward in a tangential plane at an angle to the transport (horizontal) plane; Column 2, lines 61-67). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Klimesch '379's diverting force to tabulate Dabal's belt in order to most efficiently achieve the unitizing operation. Dabal does not show passing the solidified tablet belt underneath a roller that diverts the tablet belt. Langner shows that it is known to make compacted tablets by passing the tablets/belt underneath a roller which directly contacts the solidified tablets/belt (Figure 1, element 7; Column 5, lines 20-31). It would have been prima facie obvious to one of ordinary skill in the art to use Langner's diverting roller during Dabal's method because substitution of equivalents (singulating mechanisms) is prima facie obvious (MPEP 2144.06 (II)).

Regarding Claim 7, Dabal shows the apparatus as claimed as discussed in the rejection of Claim 12 above, including a machine wherein the singulating means comprises at least one rotatable roller (Figure 5, unitizing unit).

Regarding Claim 8, Dabal shows the apparatus as claimed as discussed in the rejection of Claim 7 above, including a machine wherein the singulating means comprises two counter-rotating rollers which can be pressed against one another (Figure 5, unitizing unit).

Regarding Claim 9, Dabal shows the apparatus as claimed as discussed in the rejection of Claim 12 above, including a machine wherein the singulating means comprises at least one embossed roller (Column 22, lines 58-63).

Regarding Claim 11, Dabal shows the apparatus as claimed as discussed in the rejection of Claim 12 above, including a machine wherein a second transport means is provided between the singulating means and the deflashing means and the deflashing means comprises a shaking or vibrating unit (Column 30, lines 12-19; Column 32, lines 13-18; It is noted that by suggesting that the tablets are amenable to online testing

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throughout their production, Dabal implies that the tablets are transported from the unitizing to the deflashing operation in a predetermined fashion.).

Claims 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dabal, in view of Klimesch. Regarding Claim 13, Dabal shows that it is known to carry out a method for producing tablets by melt extrusion (Column 8, lines 1-44; Column 10, lines 3-13), in which an extrudable pharmaceutical mixture is heated and extruded in the form of a continuous product strip, wherein, in a first stage, the still deformable product strip is compressed to a continuous tablet belt, the individual tablets in the belt being connected together by product webs (Figure 5, element 82, 83; Figure 6B), in a second stage, downstream of the first stage, the tablet belt is allowed to cool to form a solidified tablet belt (Figure 5, printing unit; It is noted that ambient cooling will take place along the transport sections.), in a third stage, downstream of the second stage, the tablets are mechanically singulated in a continuous process (Figure 5, unitizing unit), and then the singulated tablets are transported further to a fourth stage downstream of the said third stage where the singulated tablets are subsequently deflashed (Column 32, lines 13-18), including a method wherein a force with a component perpendicular to the plane of the tablet belt is allowed to act on the tablet belt for singulation of the tablet (Figure 5, unitizing unit; It is noted that the force exerted by the roller will have at least two components.). Dabal does not show a directional force that diverts the tablet belt in a downward direction from a transport plane to a tangential plane at an angle to the transport plane. Klimesch '379 shows that it is known to carry out a method wherein the perpendicular force component is generated by diverting the solidified tablet belt downwardly out of its transport plane to an angled tangential plane (Figure 1: singulated tablets are diverted downward in a tangential plane at an angle to the transport (horizontal) plane; Column 2, lines 61-67). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Klimesch '379's diverting force to tabulate Dabal's belt in order to most efficiently achieve the unitizing operation.

Regarding Claim 14, Dabal shows the process as claimed as discussed in the rejection of Claim 13 above, but he does not show extruding a mixture containing a pharmaceutically active ingredient. Klimesch shows that it is known to carry out a method of extruding a mixture containing a pharmaceutically active ingredient (Column 2, lines 40-63). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Klimesch's melt extrusion composition that includes a pharmaceutically active ingredient during Dabal's molding process in order to avoid having to add the active ingredient at a later stage after extrusion.

Regarding Claim 15, Dabal shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein singulating and said melt extrusion speed are substantially similar (Column 22, lines 9-19).

Regarding Claim 16, Dabal shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein a speed of a breaking roller is configured to match a speed of a transport belt (Figures 3, 4A; Column 21, lines 42-49; Column 22, lines 5-25; Column 23, lines 9-19).

Regarding Claim 17, Dabal shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein the melt extrusion and singulating are continuous (Column 12, lines 66-68; Column 13, lines 1-8).

Regarding Claims 18-19; Dabal shows the process as claimed as discussed in the rejection of Claim 13 above, including a method wherein the cooling renders the continuous tablet belt resistant to bending or deformation (Figures 5; It is being interpreted that ambient cooling renders the belt able to be transported independently without bending or deforming out of line with the rollers and subsequent processing stations).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONICA HUSON whose telephone number is (571)272-1198. The examiner can normally be reached on Monday-Friday 10:00am-6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Monica A Huson
Primary Examiner
Art Unit 1742

/Monica A Huson/

Primary Examiner, Art Unit 1742